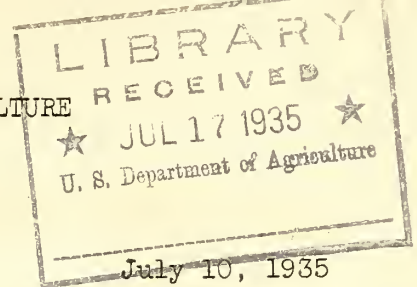


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UNITED STATES DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
Washington



Office of the Chief

TO ALL PILOT BALLOON STATIONS:

High Altitude Wind Aloft Data

Recent developments in the aviation industry, emphasize the need of securing the greatest possible number of pilot balloon observations to high altitudes. The following instructions are issued, therefore, with a view to lengthening at least one of the daily observations at all pilot balloon stations located at airports.

1. Continue the 5:00 p.m. E. S. T. pilot balloon observations to the greatest possible height. Observations made at other times may be abandoned when absolutely necessary but must be continued at least 22 minutes for the intermediate observation and 30 minutes for the 5 a.m. E. S. T. observation, unless cut short by adverse atmospheric conditions.
2. Airport stations at which only one man is regularly available for the 5:00 p.m. E. S. T. observations are hereby directed to take their hourly surface observation at 4:35 p.m. E. S. T. and file it with the teletype operator with instructions to transmit it as a current observation in all subsequent sequences and broadcasts during the following sixty minutes unless changed by check or special observations. Prior to taking this surface observation, the balloon should be inflated, the theodolite set up and everything made ready to take the run. If conditions at 4:35 p.m. indicate there is likely to be a change before the observation is transmitted in subsequent sequences or broadcasts, the Weather Bureau employee should request the Commerce employee to contact him at the theodolite for a check observation. This will make it possible (except in cases of rapid changing conditions, requiring the filing of a check or special observation) for the observer to release the balloon at about 4:40 p.m. and to continue the observation if atmospheric conditions permit, until about 5:30 p.m. An alternate method of accomplishing the same result is also suggested where feasible, namely, the overlapping of work tricks so that two men are on duty during the hour between 5:00 and 6:00 p.m. E. S. T.
3. During that part of the year when stations located in the 75-Meridian time zone, must use lanterns for the 5:00 p.m. observations, the 11:00 a.m. observations (if scheduled) are to be continued to the greatest possible height by those stations; the same procedure, regarding the early filing of the hourly surface observations being followed as outlined above.
4. When "abandoned" is given as the reason for discontinuing a pilot balloon observation at the 5 p.m. E. S. T. period, an explanatory note must always be given to show why it was necessary.

5. When a balloon bursts within a period of ten minutes after release, a second observation must immediately be made.

6. The first 22 minutes and the last three minutes should be plotted, worked up and the message filed before completing the remainder of the observation. This will be necessary in order that an early filing time can be maintained.

7. When scheduled observations are not taken, for any reason, or if they are taken late a "No run" message will be filed with the reason given. Example:

WA 1700 NO RUN LOW CLOUDS
CV 1700 RUN LATE

This will permit the relays to be made and checked on teletype and radio circuits, thus lessening the failures which have heretofore existed in the relay of upper air observations.

8. These instructions supersede similar instructions appearing in Topics and Personnel for September, 1932.



W. R. Gregg,
Chief of Bureau.